

From: [Nelson, Walt](#)
To: [Roser, Sara](#)
Subject: RE: Hawaii 2001 and 2003 emap data
Date: Tuesday, April 09, 2013 3:08:50 PM
Attachments: [HI01export.kml](#), [Mamala_Bay_2001_enterococcus_summary.doc](#), [mamala_shoreline_actual_2001.pdf](#), [2001 Mamala Enterococcus short.xls](#)

Attached are several files related to the Enterococcus data from the 2001 Mamala Bay regional study. Also included is a KML file of the sample locations for Google Earth which would allow you to zoom in and see where the sampling points were on the shoreline. The PDF shows the distribution of the sampling points. The notes in the spreadsheet note that there were multiple sample dates for shoreline bacterial samples.

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From: Roser, Sara
Sent: Tuesday, April 09, 2013 8:28 AM
To: Nelson, Walt
Subject: RE: Hawaii 2001 and 2003 emap data

Let's wait on the sediment contaminant data for now. I will look over the files I already have. I have not used SAS in years. Also, I don't want you to have to go to the effort of converting the files to Excel while I'm still getting organized. Thanks, Sara

From: Nelson, Walt
Sent: Tuesday, April 09, 2013 8:24 AM
To: Roser, Sara
Subject: RE: Hawaii 2001 and 2003 emap data

I will look over what I have. Looked like the outputs were in SAS table files, so might take some effort to convert to Excel files, unless you use SAS.

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From: Roser, Sara
Sent: Tuesday, April 09, 2013 7:32 AM
To: Nelson, Walt
Subject: RE: Hawaii 2001 and 2003 emap data

Thank you very much Walt. This is very helpful, and I appreciate you taking the time to look back into these old files. This connects the pieces and gets me started.

Even though it is not written up, do you mind sharing the analysis of the sediment contaminant data that you started? In the meantime, I will look back through the CCH reports to see what was submitted.

Thanks again.

Sara

From: Nelson, Walt
Sent: Monday, April 08, 2013 5:43 PM
To: Roser, Sara
Subject: RE: Hawaii 2001 and 2003 emap data

I do have a fairly complete database in Access for the 2001 Mamala Bay sampling effort. I have the original design files for 2001, but there is a summary table in the database. Attached is a PDF schematic map of the sampling design. As Tony said, the design was done in Gulf Breeze by a USGS contractor by a method no longer recommended. It was fairly complicated, with some strata having only water samples (shoreline) and others (offshore) having benthic and sediment samples. Bacteria were a big concern and driver for the regional sampling design back then.

Also attached are reports on the 2001 and 2003 analyses of the benthos from the offshore sites, which are probably the most detailed written summary information available, at least that I am aware of. I did analyze some of the bacterial data from 2001, and it looks like I ran some of the sediment contaminant parameters, but I never wrote any of it up. I am not aware of a complete report on all of the 2001 or 2003 data, but that would have been coming in to Janet and Region 9 and not to ORD.

I do not have any design information for 2003, and I have a vague recollection that they may have sampled the same stations rather than doing a reselection in 2003, but don't quote me on that. Janet might remember.

I found the 2003 files mentioned in Ross's second email, and should have the 2001 files or their equivalent in order to generate the database.

As I said, let me know what else you would like.

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From: Roser, Sara
Sent: Monday, April 08, 2013 2:51 PM
To: Nelson, Walt
Subject: RE: Hawaii 2001 and 2003 emap data

Hi Walt, Thanks for your response. It is good to know these details.

The two attached emails from Ross Tanimoto at the City and County of Honolulu (CCH) made me curious about the 2001 and 2003 data. Cindy Lin probably knows more about these data, but she is busy with a TMDL deadline. I am wondering how the 2001 and 2003 data relate to your report (*Condition for Estuaries and Bays of Hawaii for 2002: A Statistical Summary*). When I talked with Janet a little bit more this morning, she recalled that CCH conducted monitoring in 2001 and 2003 based on a regional sample design, and these surveys were in addition to the 2002 survey described in your report. Does that sound correct? I don't know if the 2001 and 2003 data were analyzed.

I will keep looking in our files for more details, and I will talk with Cindy when she has a few spare minutes. I'll also appreciate hearing any other details about the 2001-03 surveys.

Thanks, Sara

From: Nelson, Walt
Sent: Monday, April 08, 2013 9:29 AM
To: Olsen, Tony; Roser, Sara
Cc: Peck, Dave; Hansen, Virginia
Subject: RE: Hawaii 2001 and 2003 emap data

Sara:

I should have the original design information for the Hawaii surveys. Also, as a further piece of information, prior to EPA I was responsible for the initial design of the 301H monitoring programs for Barbers Point and Honouliuli, and produced most of the monitoring reports from the mid 80's until mid 90's for those outfalls. I have not kept up with the monitoring changes in the last decade, but am familiar with a number of the issues and challenges of sampling in that area. This is not the first time a regional monitoring program has been discussed for that area.

Walt Nelson

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From: Olsen, Tony
Sent: Monday, April 08, 2013 9:10 AM
To: Roser, Sara
Cc: Peck, Dave; Nelson, Walt; Hansen, Virginia
Subject: RE: Hawaii 2001 and 2003 emap data

Gulf Breeze did the designs during this period. What I have is below. They used a very old hexagon sampling program that I would no longer recommend being used. If you want to keep the classes for Oahu, that would be fine. Virginia Hansen in Gulf Breeze may be able to provide more information.

It would be better to define the regions that are most appropriate for the NPDES discharge permit regions and the current NCCA regions for the area. Walt Nelson may also know more about the design and what may be appropriate for your question as well.

Having the regional permit monitoring integrated with NCCA 2015 may be desirable as well.

Tony

Hawaii	West	University of Hawaii EPA Region 10 EPA - WED	2	2001-2002	This design is comprised of a statewide assessment of estuaries and several special studies. The statewide samples were subdivided into 4 resource classes based on size with a special class for south shore Oahu estuaries (3 classes.) Each primary class used a different hexagonal grid size (0.55, 2.5, 4.98, 6.78 sq km) to result in 50 sampling sites (10, 10, 10, and 20, respectively). The three classes of south shore Oahu estuaries resulted in 3 grid sizes (0.05, 0.03 and 0.02 km ²) and 30 sites (22, 3 and 5 sites, respectively). Additional intensifications for Oahu south shore beaches, inshore Mamala Bay and offshore Mamala Bay and two discharge areas were
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completed. The beach uses linear segments of 1075 m resulting in 30 probabilistic sites. The inshore Mamala Bay area uses a grid of 0.7 sq km and 30 sites while the offshore area used a grid of 2.22 sq km resulting in 40 sites. Within Mamala Bay there are two intensifications at discharge ports (one uses a grid of 0.05 sq km and 15 sites and the other at 0.01 sq km and 15 sites).

From: Peck, Dave
Sent: Friday, April 05, 2013 9:40 AM
To: Olsen, Tony
Cc: Roser, Sara
Subject: FW: Hawaii 2001 and 2003 emap data

HELP PLEEE??!!

From: Roser, Sara
Sent: Friday, April 05, 2013 8:47 AM
To: Peck, Dave
Subject: Hawaii 2001 and 2003 emap data

Hi Dave,

The Hawaii Dept. of Health is in the process of reissuing NPDES discharge permits for two WWTP plants on south Oahu (Sand Island and Honouliuli). We would like to add a requirement to the permit for regional monitoring. I believe there were two emap studies on the coast of southern Oahu in 2001 and 2003. We thought it might be good to follow the same design during the next permit period. Do you have any information from these two studies from 2001 and 2003? I have found pieces of data sets, but I have not yet found the original study design or sample site locations.

By the way, we really appreciated the R training in March.

Thanks very much.
Sara